

FIG. 1A

GAATTCTCTGGACTGAGGCTCCAGTTCTGGCCTTTGGGG
 TTCAAGATCACTGGGACCAGGCCGTGATCTCTATGCCCCGAGTCTCAACCCTCAACTGTC
 ACCCCAAGGCACTTGGGACGTCCTGGACAGACCGAGTCCCGGAAGCCCCAGCACTGCC

GCTGCCACACTGCCCTGAGCCCAATGGGGGAGTGAGAGGCCA TAG CTG TCT GGC

S1		S5		S10		S15
Met Gly Leu Ser Thr Val Pro Asp Leu Leu Leu Pro Leu Val Leu						
ATG GGC CTC TCC ACC GTG CCT GAC CTG CTG CTG CCA CTG GTG CTC						
216		225		234		243 252

	S20		S25		S29	1
Leu Glu Leu Leu Val Gly Ile Tyr Pro Ser Gly Val Ile Gly Leu						
CTG GAG CTG TTG GTG GGA ATA TAC CCC TCA GGG GTT ATT GGA CTG						
261	270		279		288	297

	5		10		15
Val Pro His Leu Gly Asp Arg Glu Lys Arg Asp Ser Val Cys Pro					
GTC CCT CAC CTA GGG GAC AGG GAG AAG AGA GAT AGT GTG TGT CCC					
306	315		324		333 342

	20		25		30
Gln Gly Lys Tyr Ile His Pro Gln Asn Asn Ser Ile Cys Cys Thr					
CAA GGA AAA TAT ATC CAC CCT CAA AAT AAT TCG ATT TGC TGT ACC					
351	360		369		378 387

	35		40		45
Lys Cys His Lys Gly Thr Tyr Leu Tyr Asn Asp Cys Pro Gly Pro					
AAG TGC CAC AAA GGA ACC TAC TTG TAC AAT GAC TGT CCA GGC CCG					
396	405		414		423 432

	50		55		60
Gly Gln Asp Thr Asp Cys Arg Glu Cys Glu Ser Gly Ser Phe Thr					
GGG CAG GAT ACG GAC TGC AGG GAG TGT GAG AGC GGC TCC TTC ACC					
441	450		459		468 477

	65		70		75
Ala Ser Glu Asn His Leu Arg His Cys Leu Ser Cys Ser Lys Cys					
GCT TCA GAA AAC CAC CTC AGA CAC TGC CTC AGC TGC TCC AAA TGC					
486	495		504		513 522

	80		85		90
Arg Lys Glu Met Gly Gln Val Glu Ile Ser Ser Cys Thr Val Asp					
CGA AAG GAA ATG GGT CAG GTG GAG ATC TCT TCT TGC ACA GTG GAC					
531	540		549		558 567

FIG. 1A

FIG. 1B

95															100					105				
Arg	Asp	Thr	Val	Cys	Gly	Cys	Arg	Lys	Asn	Gln	Tyr	Arg	His	Tyr										
CGG	GAC	ACC	GTG	TGT	GGC	TGC	AGG	AAG	AAC	CAG	TAC	CGG	CAT	TAT										
576			585			594			603			612												
110															115					120				
Trp	Ser	Glu	Asn	Leu	Phe	Gln	Cys	Phe	Asn	Cys	Ser	Leu	Cys	Leu										
TGG	AGT	GAA	AAC	CTT	TTC	CAG	TGC	TTC	AAT	TGC	AGC	CTC	TGC	CTC										
621			630			639			648			657												
125															130					135				
Asn	Gly	Thr	Val	His	Leu	Ser	Cys	Gln	Glu	Lys	Gln	Asn	Thr	Val										
AAT	GGG	ACC	GTG	CAC	CTC	TCC	TGC	CAG	GAG	AAA	CAG	AAC	ACC	GTG										
666			675			684			693			702												
140															145					150				
Cys	Thr	Cys	His	Ala	Gly	Phe	Phe	Leu	Arg	Glu	Asn	Glu	Cys	Val										
TGC	ACC	TGC	CAT	GCA	GGT	TTC	TTT	CTA	AGA	GAA	AAC	GAG	TGT	GTC										
711			720			729			738			747												
155															160					165				
Ser	Cys	Ser	Asn	Cys	Lys	Lys	Ser	Leu	Glu	Cys	Thr	Lys	Leu	Cys										
TCC	TGT	AGT	AAC	TGT	AAG	AAA	AGC	CTG	GAG	TGC	ACG	AAG	TTG	TGC										
756			765			774			783			792												
170															175					180				
Leu	Pro	Gln	Ile	Glu	Asn	Val	Lys	Gly	Thr	Glu	Asp	Ser	Gly	Thr										
CTA	CCC	CAG	ATT	GAG	AAT	GTT	AAG	GGC	ACT	GAG	GAC	TCA	GGC	ACC										
801			810			819			828			837												
185															190					195				
Thr	Val	Leu	Leu	Pro	Leu	Val	Ile	Phe	Phe	Gly	Leu	Cys	Leu	Leu										
ACA	GTG	CTG	TTG	CCC	CTG	GTC	ATT	TTC	TTT	GGT	CTT	TGC	CTT	TTA										
846			855			864			873			882												
200															205					210				
Ser	Leu	Leu	Phe	Ile	Gly	Leu	Met	Tyr	Arg	Tyr	Gln	Arg	Trp	Lys										
TCC	CTC	CTC	TTC	ATT	GGT	TTA	ATG	TAT	CGC	TAC	CAA	CGG	TGG	AAG										
891			900			909			918			927												
215															220					225				
Ser	Lys	Leu	Tyr	Ser	Ile	Val	Cys	Gly	Lys	Ser	Thr	Pro	Glu	Lys										
TCC	AAG	CTC	TAC	TCC	ATT	GTT	TGT	GGG	AAA	TCG	ACA	CCT	GAA	AAA										
936			945			954			963			972												
230															235					240				
Glu	Gly	Glu	Leu	Glu	Gly	Thr	Thr	Thr	Lys	Pro	Leu	Ala	Pro	Asn										
GAG	GGG	GAG	CTT	GAA	GGA	ACT	ACT	ACT	AAG	CCC	CTG	GCC	CCA	AAC										
981			990			999			1008			1017												

FOE020"22466660

FIG. 1C

Pro	Ser	Phe	245	Ser	Pro	Thr	Pro	Gly	250	Phe	Thr	Pro	Thr	Leu	Gly	255	Phe
CCA	AGC	TTC	AGT	CCC	ACT	CCA	GGC	TTC	ACC	CCC	ACC	CTG	GGC	TTC			
1026			1035			1044			1053			1062					
Ser	Pro	Val	260	Pro	Ser	Ser	Thr	Phe	265	Thr	Ser	Ser	Ser	Thr	Tyr	270	Thr
AGT	CCC	GTG	CCC	AGT	TCC	ACC	TTC	ACC	TCC	AGC	TCC	ACC	TAT	ACC			
1071			1080			1089			1098			1107					
Pro	Gly	Asp	275	Cys	Pro	Asn	Phe	Ala	280	Ala	Pro	Arg	Arg	Glu	Val	285	Ala
CCC	GGT	GAC	TGT	CCC	AAC	TTT	GCG	GCT	CCC	CGC	AGA	GAG	GTG	GCA			
1116			1125			1134			1143			1152					
Pro	Pro	Tyr	290	Gln	Gly	Ala	Asp	Pro	295	Ile	Leu	Ala	Thr	Ala	Leu	300	Ala
CCA	CCC	TAT	CAG	GGG	GCT	GAC	CCC	ATC	CTT	GCG	ACA	GCC	CTC	GCC			
1161			1170			1179			1188			1197					
Ser	Asp	Pro	305	Ile	Pro	Asn	Pro	Leu	310	Gln	Lys	Trp	Glu	Asp	Ser	315	Ala
TCC	GAC	CCC	ATC	CCC	AAC	CCC	CTT	CAG	AAG	TGG	GAG	GAC	AGC	GCC			
1206			1215			1224			1233			1242					
His	Lys	Pro	320	Gln	Ser	Leu	Asp	Thr	325	Asp	Asp	Pro	Ala	Thr	Leu	330	Tyr
CAC	AAG	CCA	CAG	AGC	CTA	GAC	ACT	GAT	GAC	CCC	GCG	ACG	CTG	TAC			
1251			1260			1269			1278			1287					
Ala	Val	Val	335	Glu	Asn	Val	Pro	Pro	340	Leu	Arg	Trp					
GCC	GTG	GTG	GAG	AAC	GTG	CCC	CCG	TTG	CGC	TGG	AA	<u>GGAATTC</u>					
1296			1305			1314			1323			1332					

FOE020' 22466850

FIG. 2

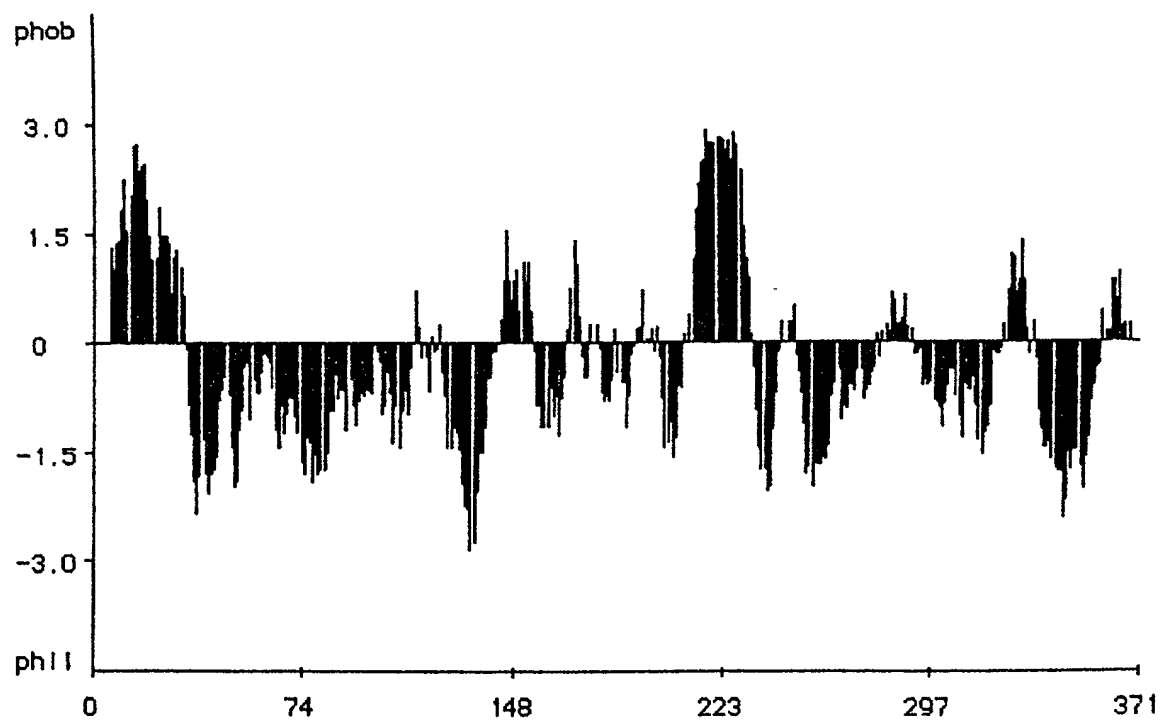


FIG. 3A

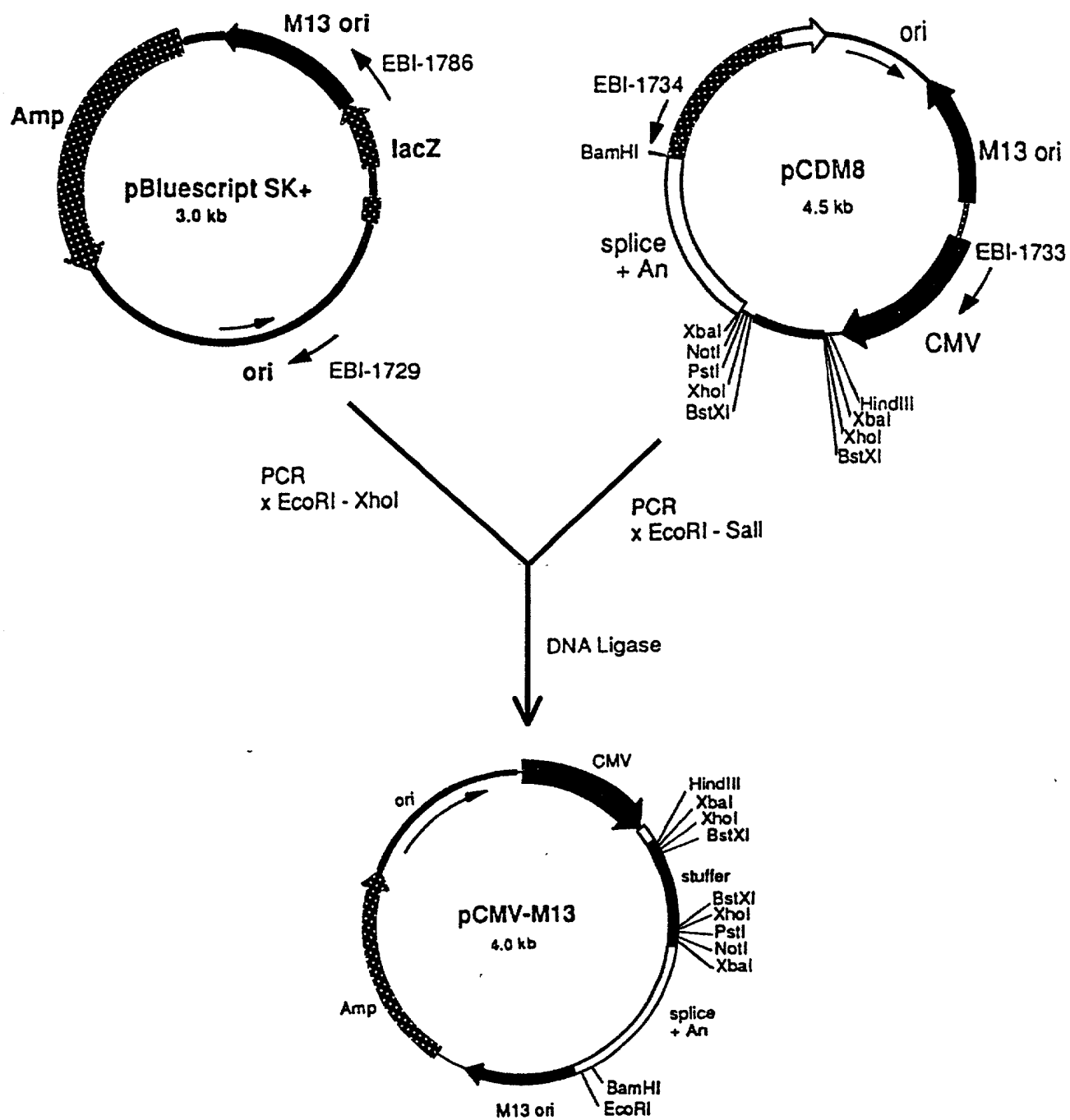


FIG. 3A

FIG. 3B

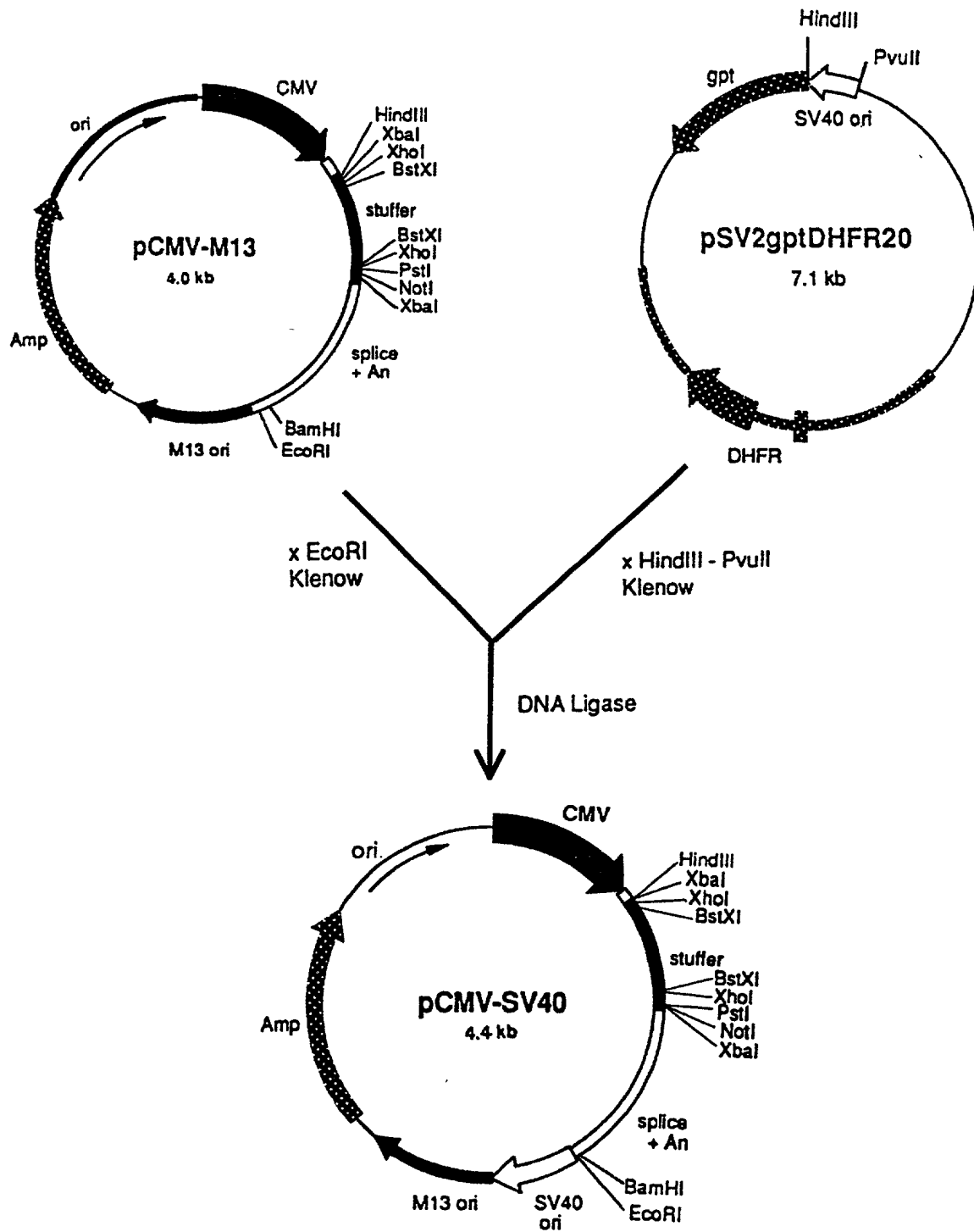
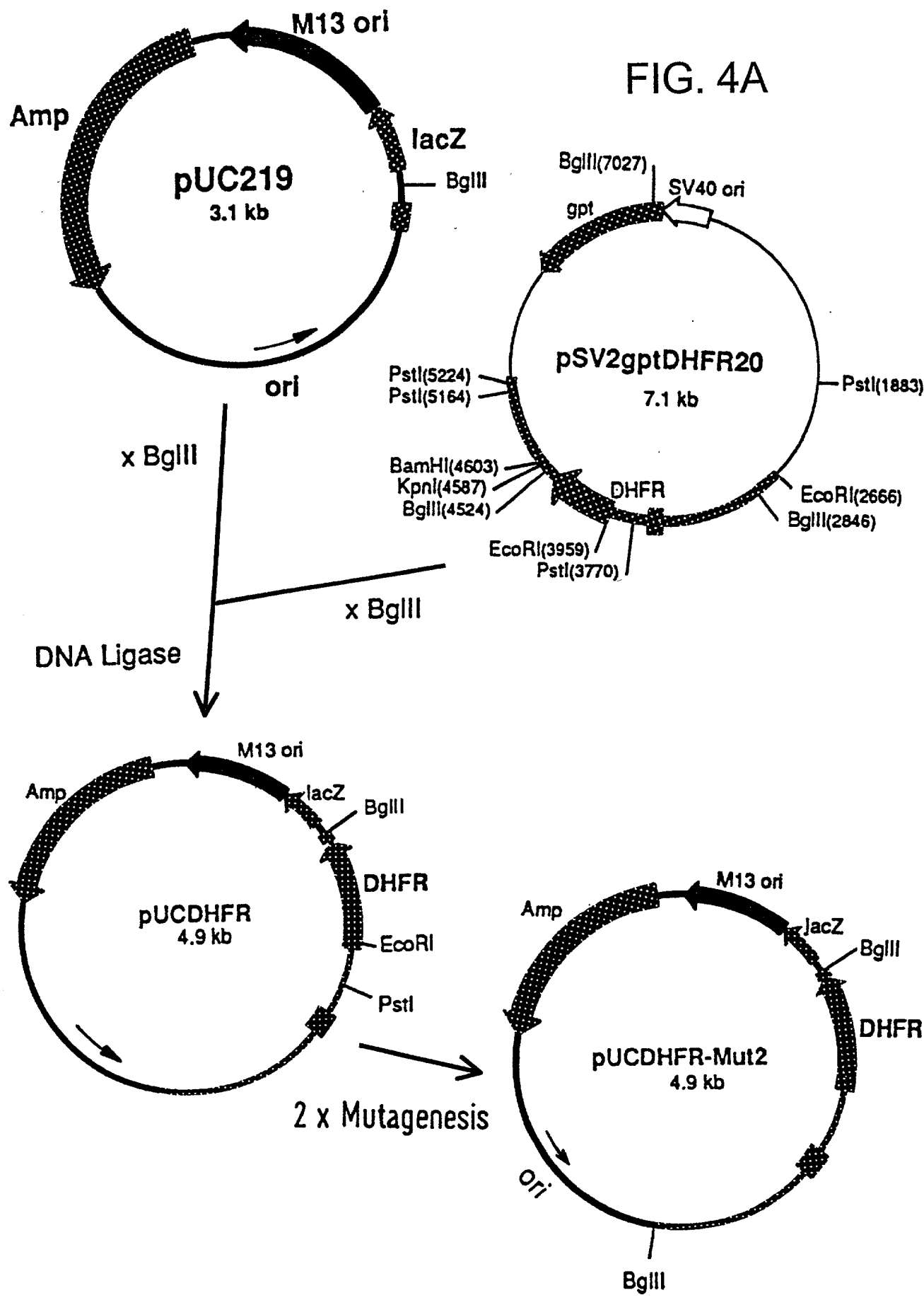
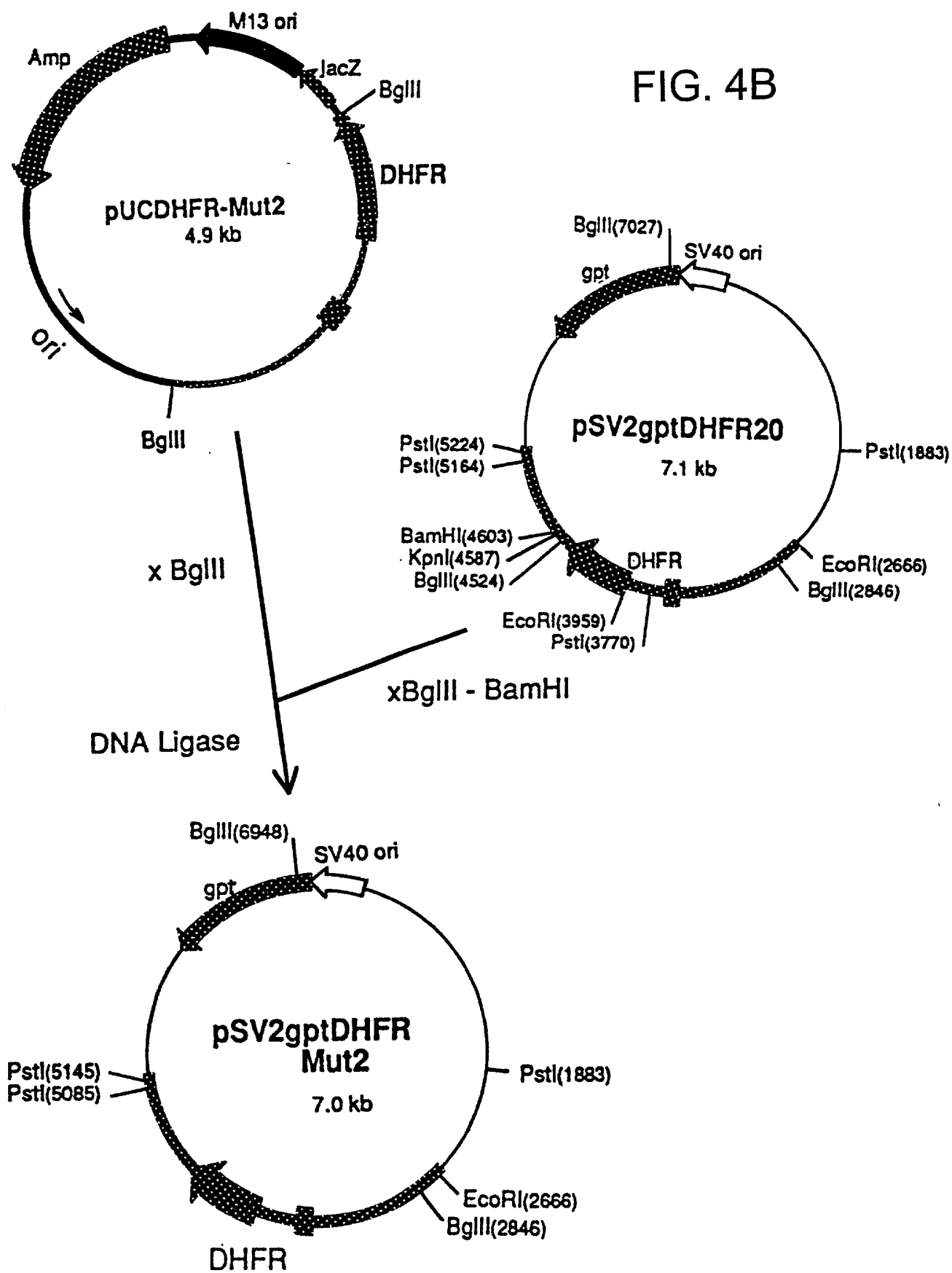


FIG. 3B

FIG. 4A

FIG. 4A





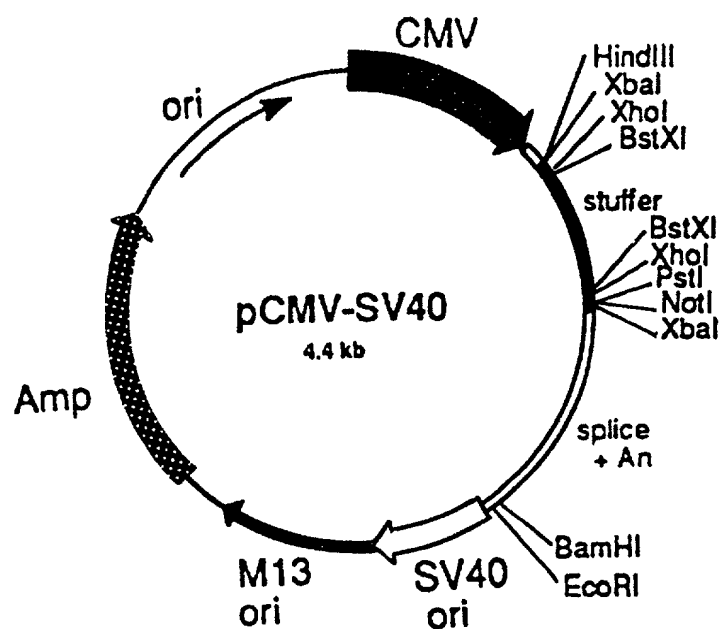
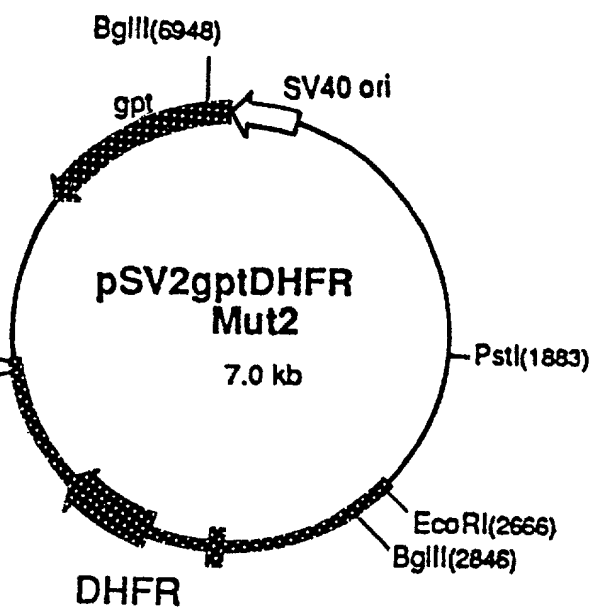


FIG. 5A

x BamHI - EcoRI
Klenow



x EcoRI - PstI
T4 DNA Polymerase

DNA Ligase

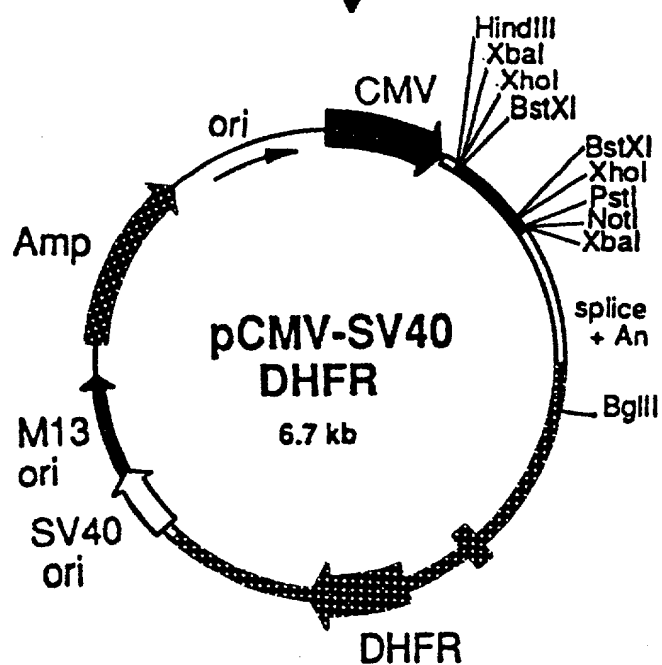


FIG. 5B

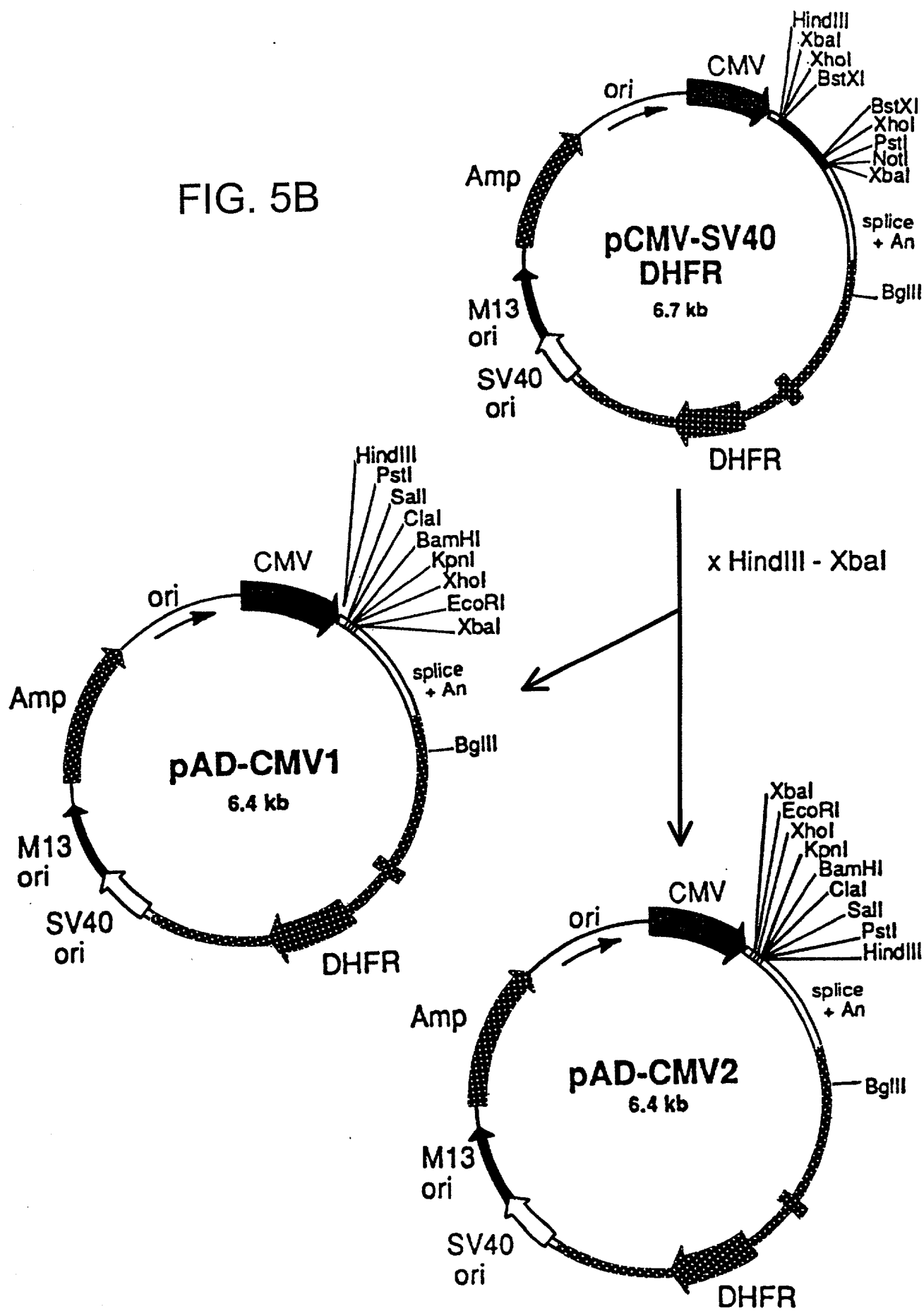


FIG. 6A

pAD-CMV1 : 6414 bp

TCGACATTGA TTATTGACTA GTTATTAATA GTAATCAATT ACGGGGTCAT TAGTTCATAG	60
CCCATATATG GAGTTCCGCG TTACATAACT TACGGTAAAT GGCCCGCCTG GCTGACCGCC	120
CAACGACCCC CGCCCATTGA CGTCAATAAT GACGTATGTT CCCATAGTAA CGCCAATAGG	180
GACTTTCCAT TGACGTCAAT GGGTGGAGTA TTTACGGTAA ACTGCCCCACT TGGCAGTACA	240
TCAAGTGTAT CATATGCCAA GTACGCCCCC TATTGACGTC AATGACGGTA AATGGCCCGC	300
CTGGCATTAT GCCCAGTACA TGACCTTATG GGACTTTCCT ACTTGGCAGT ACATCTACGT	360
ATTAGTCATC GCTATTACCA TGGTGATGCG GTTTTGGCAG TACATCAATG GGCGTGGATA	420
GCGGTTTGAC TCACGGGGAT TTCCAAGTCT CCACCCCAT T GACGTCAATG GGAGTTTGTT	480
TTGGCACCAA AATCAACGGG ACTTTCCAAA ATGTCGTAAC AACTCCGCCC CATTGACGCA	540
AATGGGCGGT AGGCGTGTAC GGTGGGAGGT CTATATAAGC AGAGCTCTCT GGCTAACTAG	600
AGAACCCACT GCTTAACTGG CTTATCGAAA TTAATACGAC TCACTATAGG GAGACCCAAG	660
CTTCTGCAGG TCGACATCGA TGGATCCGGT ACCTCGAGCG CGAATTCTCT AGAGGATCTT	720
TGTGAAGGAA CCTTACTTCT GTGGTGTGAC ATAATTGGAC AACTACCTA CAGAGATTTA	780
AAGCTCTAAG GTAAATATAA AATTTTTAAG TGTATAATGT GTTAACTAC TGATTCTAAT	840
TGTTTGTGTA TTTTAGATTC CAACCTATGG AACTGATGAA TGGGAGCAGT GGTGGAATGC	900
CTTTAATGAG GAAAACCTGT TTTGCTCAGA AGAAATGCCA TCTAGTGATG ATGAGGCTAC	960
TGCTGACTCT CAACATTCTA CTCCTCCAAA AAAGAAGAGA AAGGTAGAAG ACCCCAAGGA	1020
CTTTCCTTCA GAATTGCTAA GTTTTTTGAG TCATGCTGTG TTTAGTAATA GAACTCTTGC	1080
TTGCTTTGCT ATTTACACCA CAAAGGAAAA AGCTGCACTG CTATACAAGA AAATTATGGA	1140
AAAATATTTG ATGTATAGTG CCTTGACTAG AGATCATAAT CAGCCATACC ACATTTGTAG	1200
AGGTTTTACT TGCTTTAAAA AACCTCCAC ACCTCCCCCT GAACCTGAAA CATAAAATGA	1260
ATGCAATTGT TGTTGTTAAC TTGTTTATTG CAGCTTATAA TGGTTACAAA TAAAGCAATA	1320
GCATCACAAA TTTCACAAAT AAAGCATTTT TTCACTGCA TTCTAGTTGT GGTTTGTCCA	1380
AACTCATCAA TGTATCTTAT CATGTCTGGA TCAATTCTGA GAACTAGCC TTAAAGACAG	1440

FIG. 6B

ACAGCTTTGT	TCTAGTCAGC	CAGGCAAGCA	TATGTAAATA	AAGTTCCTCA	GGGAAGTGA	1500
GTTAAAAGAT	GTATCCTGGA	CCTGCCAGAC	CTGGCCATTC	ACGTAAACAG	AAGATTCCGC	1560
CTCAAGTTCC	GGTTAACAA	AGGAGGCAAC	GAGATCTCAA	ATCTATTACT	TCTAATCGGG	1620
TAATTAAAAC	CTTTCAACTA	AAACACGGAC	CCACGGATGT	CACCCACTTT	TCCTTCCCCG	1680
GCTCCGCCCT	TCTCAGTACT	CCCCACCATT	AGGCTCGCTA	CTCCACCTCC	ACTTCCGGGC	1740
GCGACACCCA	CGTGCCCTCT	CCCACCCGAC	GCTAACCCCG	CCCCTGCCCC	TCTGACCCCG	1800
CCCACCACCT	GGCCCCGCCC	CGTTGAGGAC	AGAAGAAACC	CCGGGCAGCC	GCAGCCAAGG	1860
CGGACGGGTA	GACGCTGGGG	GCGCTGAGGA	GTCGTCTCT	ACCTTCTCTG	CTGGCTCGGT	1920
GGGGGACGCG	GTGGATCTCA	GGCTTCCGGA	AGACTGGAAG	AACCGGCTCA	GAACCGCTTG	1980
TCTCCGCGGG	GCTTGGGCGG	CGGAAGAATG	GCCGCTAGAC	GCGGACTTGG	TGCGAGGCAT	2040
CGCAGGATGC	AGAAGAGCAA	GCCCGCCGGG	AGCGCGCGGC	TGTACTACCC	CGCGCCTGGA	2100
GCGGCCACGC	CGGACTGGGC	GGGGCCGGCC	TGGTGGAGGC	GGAGTCTGAC	CTCGTGGAGG	2160
CGGGGCCTCT	GATGTTCAAA	TAGGATGCTA	GGCTTGTTGA	GGCGTGGCCT	CCGATTACAA	2220
AGTGGAAGC	AGCGCCGGGC	GACTGCAATT	TCGCGCCAAA	CTTGGGGGAA	GCACAGCGTA	2280
CAGGCTGCCT	AGGTGATCGC	TGCTGCTGTC	ATGGTTCGAC	CGCTGAACTG	CATCGTCGCC	2340
GTGTCCCAGA	ATATGGGCAT	CGGCAAGAAC	GGAGACCTTC	CCTGGCCAAT	GCTCAGGTAC	2400
TGGCTGGATT	GGGTTAGGGA	AACCGAGGCG	GTTTCGCTGAA	TCGGGTCGAG	CACTTGGCGG	2460
AGACGCGCGG	GCCAACTACT	TAGGGACAGT	CATGAGGGGT	AGGCCCCGCG	GCTGCTGCCC	2520
TTGCCCATGC	CCGCGGTGAT	CCCCATGCTG	TGCCAGCCTT	TGCCAGAGAG	CGCTCTAGCT	2580
GGGAGCAAAG	TCCGGTCACT	GGGCAGCACC	ACCCCCCGGA	CTTGCAATGG	TAGCCGCTGA	2640
GATGGAGCCT	GAGCACACGT	GACAGGGTCC	CTGTTAACGC	AGTGTTTCTC	TAACTTTTCA	2700
GAACGAGTTC	AAGTACTTCC	AAAGAATGAC	CACCACCTCC	TCAGTGGAAG	GTAAACAGAA	2760
CCTGGTGATT	ATGGGCCGGA	AAACCTGGTT	CTCCATTCC	GAGAAGAATC	GACCTTTTAA	2820
GGACAGAATT	AATATAGTTC	TCAGTAGAGA	GCTCAAGGAA	CCACCACAAG	GAGCTCATTT	2880
TCTTGCCAAA	AGTCTGGACC	ATGCCTTAAA	ACTTATTGAA	CAACCAGAGT	TAGCAGATAA	2940
AGTGGACATG	GTTTGGATAG	TTGGAGGCAG	TTCCGTTTAC	AAGGAAGCCA	TGAATCAGCC	3000

FIG. 6C

AGGCCATCTC	AGACTCTTTG	TGACAAGGAT	CATGCAGGAA	TTTGAAAGTG	ACACGTTCTT	3060
CCCAGAAATT	GATTTGGAGA	AATATAAACT	TCTCCCAGAG	TACCCAGGGG	TCCTTTCTGA	3120
AGTCCAGGAG	GAAAAAGGCA	TCAAGTATAA	ATTTGAAGTC	TATGAGAAGA	AAGGCTAACA	3180
GAAAGATACT	TGCTGATTGA	CTTCAAGTTC	TACTGCTTTC	CTCCTAAAAT	TATGCATTTT	3240
TACAAGACCA	TGGGACTTGT	GTTGGCTTTA	GATCCTGTGC	ATCCTGGGCA	ACTGTTGTAC	3300
TCTAAGCCAC	TCCCCAAAGT	CATGCCCCAG	CCCCTGTATA	ATTCTAAACA	ATTAGAATTA	3360
TTTTCATTTT	CATTAGTCTA	ACCAGGTTAT	ATTAAATATA	CTTTAAGAAA	CACCATTTGC	3420
CATAAAGTTC	TCAATGCCCC	TCCCATGCAG	CCTCAAGTGG	CTCCCCAGCA	GATGCATAGG	3480
GTAGTGTGTG	TACAAGAGAC	CCCAAAGACA	TAGAGCCCCT	GAGAGCATGA	GCTGATATGG	3540
GGGCTCATAG	AGATAGGAGC	TAGATGAATA	AGTACAAAGG	GCAGAAATGG	GTTTTAACCA	3600
GCAGAGCTAG	AACTCAGACT	TTAAAGAAAA	TTAGATCAAA	GTAGAGACTG	AATTATTCTG	3660
CACATCAGAC	TCTGAGCAGA	GTTCTGTTCA	CTCAGACAGA	AAATGGGTAA	ATTGAGAGCT	3720
GGCTCCATTG	TGCTCCTTAG	AGATGGGAGC	AGGTGGAGGA	TTATATAAGG	TCTGGAACAT	3780
TTAACTTCTC	CGTTTCTCAT	CTTCAGTGAG	ATTCCAAGGG	ATACTACAAT	TCTGTGGAAT	3840
GTGTGTCAGT	TAGGGTGTGG	AAAGTCCCCA	GGCTCCCCAG	CAGGCAGAAG	TATGCAAAGC	3900
ATGCATCTCA	ATTAGTCAGC	AACCAGGTGT	GGAAAGTCCC	CAGGCTCCCC	AGCAGGCAGA	3960
AGTATGCAAA	GCATGCATCT	CAATTAGTCA	GCAACCATAG	TCCCGCCCCT	AACTCCGCCC	4020
ATCCCGCCCC	TAActCCGCC	CAGTTCCGCC	CATTCTCCGC	CCCATGGCTG	ACTAATTTTT	4080
TTTATTTATG	CAGAGGCCGA	GGCGCCTCTG	AGCTATTCCA	GAAGTAGTGA	GGAGGCTTTT	4140
TTGGAGGCCT	AGGCTTTTGC	AAAAAAGCTA	ATTCAGCCTG	AATGGCGAAT	GGGACGCGCC	4200
CTGTAGCGGC	GCATTAAGCG	CGGCGGGTGT	GGTGGTTACG	CGCAGCGTGA	CCGCTACACT	4260
TGCCAGCGCC	CTAGCGCCCG	CTCCTTTCGC	TTTCTTCCCT	TCCTTTCTCG	CCACGTTTCG	4320
CGGCTTTCCC	CGTCAAGCTC	TAAATCGGGG	GCTCCCTTTA	GGGTTCGGAT	TTAGTGCTTT	4380
ACGGCACCTC	GACCCCAAAA	ACTTGATTAG	GGTGATGGTT	CACGTAGTGG	GCCATCGCCC	4440
TGATAGACGG	TTTTTCGCCC	TTTGACGTTG	GAGTCCACGT	TCTTTAATAG	TGGACTCTTG	4500
TTCCAAACTG	GAACAACACT	CAACCCTATC	TCGGTCTATT	CTTTTGATTT	ATAAGGGATT	4560

FIG. 6D

TTGCCGATTT	CGGCCTATTG	GTAAAAAAT	GAGCTGATTT	AACAAAAATT	TAACGCGAAT	4620
TTTAACAAAA	TATTAACGTT	TACAATTCA	GGTGGCACTT	TTCGGGGAAA	TGTGCGCGGA	4680
ACCCCTATTT	GTTTATTTTT	CTAAATACAT	TCAAATATGT	ATCCGCTCAT	GAGACAATAA	4740
CCCTGATAAA	TGCTTCAATA	ATATTGAAAA	AGGAAGAGTA	TGAGTATTCA	ACATTTCCGT	4800
GTCGCCCTTA	TTCCCTTTTT	TGCGGCATTT	TGCCTTCCTG	TTTTTGCTCA	CCCAGAAACG	4860
CTGGTGAAAG	TAAAAGATGC	TGAAGATCAG	TTGGGTGCAC	GAGTGGGTTA	CATCGAACTG	4920
GATCTCAACA	GCGGTAAGAT	CCTTGAGAGT	TTTCGCCCCG	AAGAACGTTT	TCCAATGATG	4980
AGCACTTTTA	AAGTTCTGCT	ATGTGGCGCG	GTATTATCCC	GTATTGACGC	CGGGCAAGAG	5040
CAACTCGGTC	GCCGCATACA	CTATTCTCAG	AATGACTTGG	TTGAGTACTC	ACCAGTCACA	5100
GAAAAGCATC	TTACGGATGG	CATGACAGTA	AGAGAATTAT	GCAGTGCTGC	CATAACCATG	5160
AGTGATAACA	CTGCGGCCAA	CTTACTTCTG	ACAACGATCG	GAGGACCGAA	GGAGCTAACC	5220
GCTTTTTTGC	ACAACATGGG	GGATCATGTA	ACTCGCCTTG	ATCGTTGGGA	ACCGGAGCTG	5280
AATGAAGCCA	TACCAAACGA	CGAGCGTGAC	ACCACGATGC	CTGTAGCAAT	GGCAACAACG	5340
TTGCGCAAAC	TATTAAGTGG	CGAACTACTT	ACTCTAGCTT	CCCGGCAACA	ATTAATAGAC	5400
TGGATGGAGG	CGGATAAAGT	TGCAGGACCA	CTTCTGCGCT	CGGCCCTTCC	GGCTGGCTGG	5460
TTTATTGCTG	ATAAATCTGG	AGCCGGTGAG	CGTGGGTCTC	GCGGTATCAT	TGCAGCACTG	5520
GGGCCAGATG	GTAAGCCCTC	CCGTATCGTA	GTTATCTACA	CGACGGGGAG	TCAGGCAACT	5580
ATGGATGAAC	GAAATAGACA	GATCGCTGAG	ATAGGTGCCT	CACTGATTAA	GCATTGGTAA	5640
CTGTCAGACC	AAGTTTACTC	ATATATACTT	TAGATTGATT	TAAAACTTCA	TTTTTAATTT	5700
AAAAGGATCT	AGGTGAAGAT	CCTTTTTGAT	AATCTCATGA	CCAAAATCCC	TTAACGTGAG	5760
TTTTCGTTCC	ACTGAGCGTC	AGACCCCGTA	GAAAAGATCA	AAGGATCTTC	TTGAGATCCT	5820
TTTTTTCTGC	GCGTAATCTG	CTGCTTGCAA	ACAAAAAAC	CACCGCTACC	AGCGGTGGTT	5880
TGTTTGCCGG	ATCAAGAGCT	ACCAACTCTT	TTCCGAAGG	TAAGTGGCTT	CAGCAGAGCG	5940
CAGATACCAA	ATACTGTCCT	TCTAGTGTAG	CCGTAGTTAG	GCCACCACTT	CAAGAACTCT	6000
GTAGCACC GC	CTACATACCT	CGCTCTGCTA	ATCCTGTTAC	CAGTGGCTGC	TGCCAGTGGC	6060
GATAAGTCGT	GTCTTACCGG	GTTGGACTCA	AGACGATAGT	TACCGGATAA	GGCGCAGCGG	6120

FIG. 6E

TCGGGCTGAA CGGGGGGTTC GTGCACACAG CCCAGCTTGG AGCGAACGAC CTACACCGAA 6180
CTGAGATACC TACAGCGTGA GCATTGAGAA AGCGCCACGC TTCCCGAAGG GAGAAAGGCG 6240
GACAGGTATC CGGTAAGCGG CAGGGTCGGA ACAGGAGAGC GCACGAGGGA GCTTCCAGGG 6300
GGAAACGCCT GGTATCTTTA TAGTCCTGTC GGGTTTCGCC ACCTCTGACT TGAGCGTCGA 6360
TTTTTGTGAT GCTCGTCAGG GGGGCGGAGC CTATGGAAAA ACGCCAGCAA CGCC

FIG. 6E

FIG. 7A

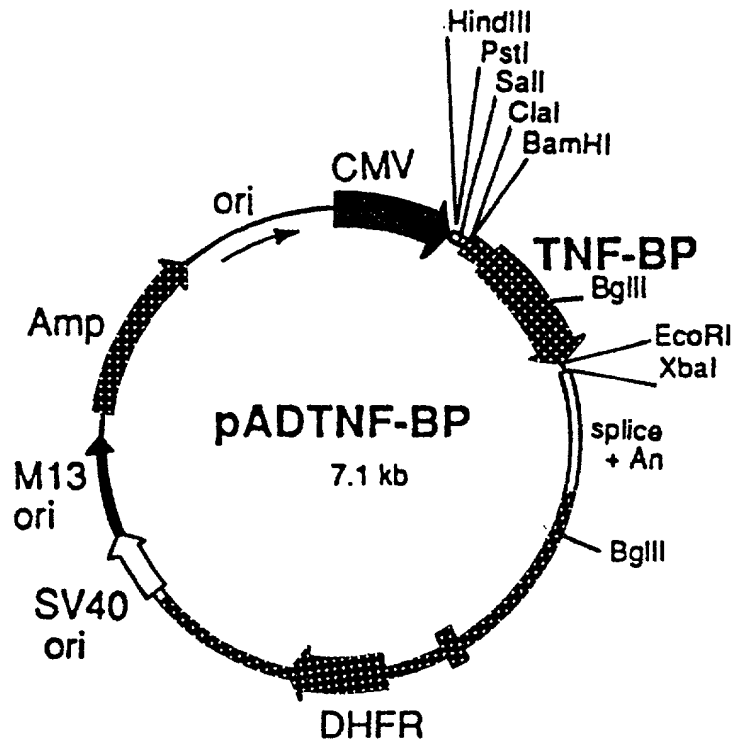


FIG. 7B

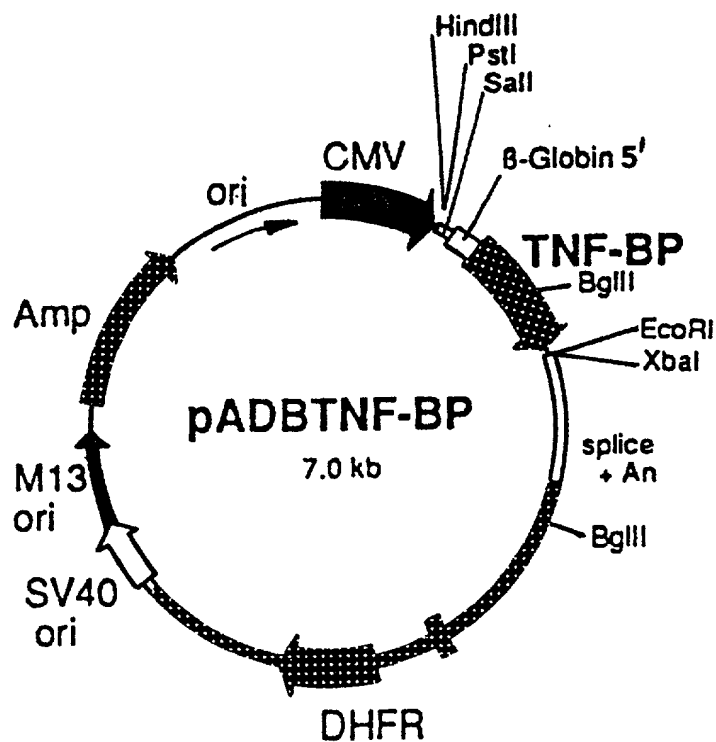


FIG. 7C

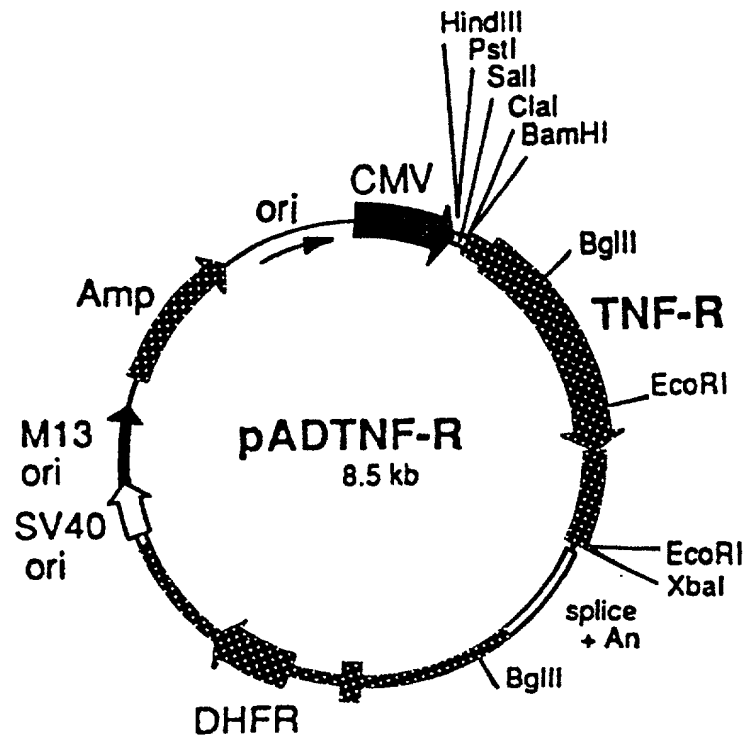


FIG. 7D

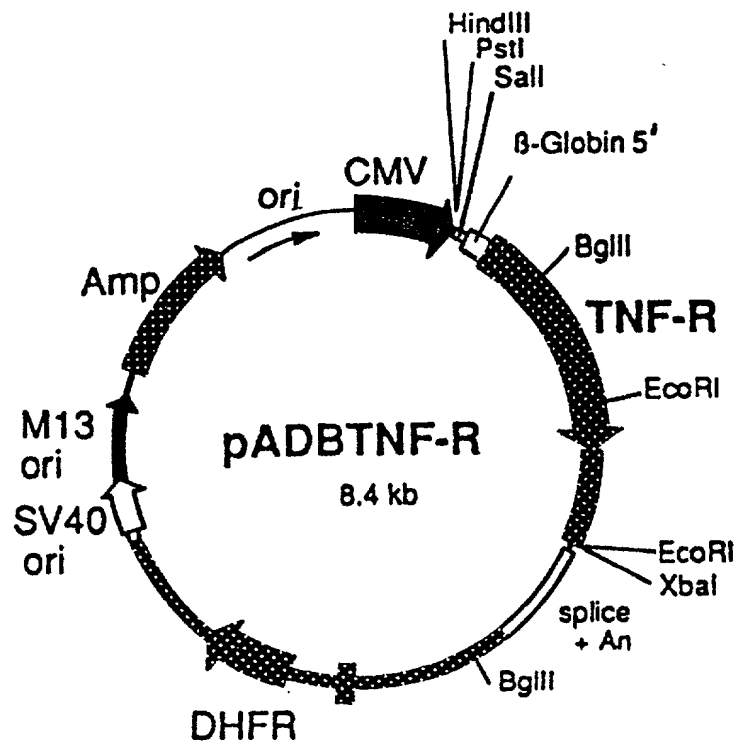


FIG. 8A

raTNF-R

GAATTCCTTT	TCTCCGAGTT	TTCTGAACTC	TGGCTCATGA	TCGGGCTTAC	TGGATACGAG	60
AATCCTGGAG	GACCGTACCC	TGATTTCCAT	CTACCTCTGA	CTTTGAGCCT	TTCTAACCCG	120
GGGCTCACGC	TGCCAACACC	CGGGCCACCT	GGTCCGATCG	TCTTACTTCA	TTCACCAGCG	180
TTGCCAATTG	CTGCCCTGTC	CCCAGCCCCA	ATGGGGGAGT	GAGAGAGGCC	ACTGCCGGCC	240
GGAC						
245/1			275/11			
ATG GGT CTC CCC ATC GTG CCT GGC CTG CTG CTG TCA CTG GTG CTC CTG GCT CTG CTG ATG						
Met Gly Leu Pro Ile Val Pro Gly Leu Leu Leu Ser Leu Val Leu Leu Ala Leu Leu Met						
305/21			335/31			
GGG ATA CAC CCA TCA GGG GTC ACC GGA CTG GTT CCT TCT CTT GGT GAC CGG GAG AAG AGG						
Gly Ile His Pro Ser Gly Val Thr Gly Leu Val Pro Ser Leu Gly Asp Arg Glu Lys Arg						
365/41			395/51			
GAT AAT TTG TGT CCC CAG GGA AAG TAT GCC CAT CCA AAG AAT AAT TCC ATC TGC TGC ACC						
Asp Asn Leu Cys Pro Gln Gly Lys Tyr Ala His Pro Lys Asn Asn Ser Ile Cys Cys Thr						
425/61			455/71			
AAG TGC CAC AAA GGA ACC TAC TTG GTG AGT GAC TGT CCA AGC CCA GGG CAG GAA ACA GTC						
Lys Cys His Lys Gly Thr Tyr Leu Val Ser Asp Cys Pro Ser Pro Gly Gln Glu Thr Val						
485/81			515/91			
TGC GAG CTC TCT CAT AAA GGC ACC TTT ACA GCT TCG CAG AAC CAC GTC AGA CAG TGT CTC						
Cys Glu Leu Ser His Lys Gly Thr Phe Thr Ala Ser Gln Asn His Val Arg Gln Cys Leu						
545/101			575/111			
AGT TGC AAG ACA TGT CGG AAA GAA ATG TTC CAG GTG GAG ATT TCT CCT TGC AAA GCT GAC						
Ser Cys Lys Thr Cys Arg Lys Glu Met Phe Gln Val Glu Ile Ser Pro Cys Lys Ala Asp						
605/121			635/131			
ATG GAC ACC GTG TGT GGC TGC AAG AAG AAC CAA TTC CAG CGC TAC CTG AGT GAG ACG CAT						
Met Asp Thr Val Cys Gly Cys Lys Lys Asn Gln Phe Gln Arg Tyr Leu Ser Glu Thr His						
665/141			695/151			
TTC CAG TGT GTG GAC TGC AGC CCC TGC TTC AAT GGC ACC GTG ACA ATC CCC TGT AAG GAG						
Phe Gln Cys Val Asp Cys Ser Pro Cys Phe Asn Gly Thr Val Thr Ile Pro Cys Lys Glu						
725/161			755/171			
AAA CAG AAC ACC GTG TGT AAC TGC CAC GCA GGA TTC TTT CTA AGC GGA AAT GAG TGC ACC						
Lys Gln Asn Thr Val Cys Asn Cys His Ala Gly Phe Phe Leu Ser Gly Asn Glu Cys Thr						
785/181			815/191			
CCT TGC AGC CAC TGC AAG AAA AAT CAG GAA TGT ATG AAG CTG TGC CTA CCT CCA GTT GCA						
Pro Cys Ser His Cys Lys Lys Asn Gln Glu Cys Met Lys Leu Cys Leu Pro Pro Val Ala						
845/201			875/211			
AAT GTC ACA AAC CCC CAG GAC TCA GGT ACT GCC GTG CTG TTG CCT CTG GTT ATC TTC CTA						
Asn Val Thr Asn Pro Gln Asp Ser Gly Thr Ala Val Leu Leu Pro Leu Val Ile Phe Leu						
905/221			935/231			
GGT CTT TGC CTT TTA TTC TTT ATC TGC ATC AGT CTA CTG TGC CGA TAT CCC CAG TGG AGG						
Gly Leu Cys Leu Leu Phe Phe Ile Cys Ile Ser Leu Leu Cys Arg Tyr Pro Gln Trp Arg						
965/241			995/251			
CCC AGG GTC TAC TCC ATC ATT TGT AGG GAT TCA GCT CCT GTC AAA GAG GTG GAG GGT GAA						
Pro Arg Val Tyr Ser Ile Ile Cys Arg Asp Ser Ala Pro Val Lys Glu Val Glu Gly Glu						
1025/261			1055/271			
GGA ATT GTT ACT AAG CCC CTA ACT CCA GCC TCT ATC CCA GCC TTC AGC CCC AAC CCC GGC						
Gly Ile Val Thr Lys Pro Leu Thr Pro Ala Ser Ile Pro Ala Phe Ser Pro Asn Pro Gly						
1085/281			1115/291			
TTC AAC CCC ACT CTG GGC TTC AGC ACC ACC CCA CGC TTC AGT CAT CCT GTC TCC AGT ACC						
Phe Asn Pro Thr Leu Gly Phe Ser Thr Thr Pro Arg Phe Ser His Pro Val Ser Ser Thr						
1145/301			1175/311			
CCC ATC AGC CCC GTC TTC GGT CCT AGT AAC TGG CAC AAC TTC GTG CCA CCT GTA AGA GAG						
Pro Ile Ser Pro Val Phe Gly Pro Ser Asn Trp His Asn Phe Val Pro Pro Val Arg Glu						
1205/321			1235/331			
GTG GTC CCA ACC CAG GGT GCT GAC CCT CTC CTC TAC GGA TCC CTC AAC CCT GTG CCA ATC						
Val Val Pro Thr Gln Gly Ala Asp Pro Leu Leu Tyr Gly Ser Leu Asn Pro Val Pro Ile						

245/1 275/11 305/21 335/31 365/41 395/51 425/61 455/71 485/81 515/91 545/101 575/111 605/121 635/131 665/141 695/151 725/161 755/171 785/181 815/191 845/201 875/211 905/221 935/231 965/241 995/251 1025/261 1055/271 1085/281 1115/291 1145/301 1175/311 1205/321 1235/331

FIG. 8B

1265/341
 CCC GCC CCT GTT CGG AAA TGG GAA GAC GTC GTC GCG GCC CAG CCA CAA CGG CTT GAC ACT
 Pro Ala Pro Val Arg Lys Trp Glu Asp Val Val Ala Ala Gln Pro Gln Arg Leu Asp Thr
 1325/361
 GCA GAC CCT GCG ATG CTG TAT GCT GTG GTG GAT GGC GTG CCT CCG ACA CGC TGG AAG GAG
 Ala Asp Pro Ala Met Leu Tyr Ala Val Val Asp Gly Val Pro Pro Thr Arg Trp Lys Glu
 1385/381
 TTC ATG CGG CTC CTG GGG CTG AGC GAG CAC GAG ATC GAG CGG CTG GAG CTG CAG AAC GGG
 Phe Met Arg Leu Leu Gly Leu Ser Glu His Glu Ile Glu Arg Leu Glu Leu Gln Asn Gly
 1445/401
 CGT TGC CTC CGC GAG GCT CAT TAC AGC ATG CTG GAA GCC TGG CGG CGC CGC ACA CCG CGA
 Arg Cys Leu Arg Glu Ala His Tyr Ser Met Leu Glu Ala Trp Arg Arg Arg Thr Pro Arg
 1505/421
 CAC GAG GCC ACG CTG GAC GTA GTG GGC CGC GTG CTT TGC GAC ATG AAC CTG CGT GGC TGC
 His Glu Ala Thr Leu Asp Val Val Gly Arg Val Leu Cys Asp Met Asn Leu Arg Gly Cys
 1565/441
 CTG GAG AAC ATC CGC GAG ACT CTA GAA AGC CCT GCC CAC TCG TCC ACG ACC CAC CTC CCG
 Leu Glu Asn Ile Arg Glu Thr Leu Glu Ser Pro Ala His Ser Ser Thr Thr His Leu Pro
 1625/461
 CGA TAA
 Arg Stop

1295/351
 1355/371
 1415/391
 1475/411
 1535/431
 1595/451

GGCCACACCC CCACCTCAGG AACGGGACTC GAAGGACCAT CCTGCTAGAT 1680
 GCCCTGCTTC CCTGTGAACC TCCTCTTTGG TCCTCTAGGG GGCAGGCTCG ATCTGGCAGG 1740
 CTCGATCTGG CAGCCACTTC CTTGGTGCTA CCGACTTGGT GTACATAGCT TTTCCCAGCT 1800
 GCCGAGGACA GCCTGTGCCA GCCACTTGTG CATGGCAGGG AAGTGTGCCA TCTGCTCCCA 1860
 GACAGCTGAG GGTGCCAAAA GCCAGGAGAG GTGATTGTGG AGAAAAAGCA CAATCTATCT 1920
 GATACCCACT TGGGATGCAA GGACCCAAAC AAAGCTTCTC AGGGCCTCCT CAGTTGATTT 1980
 CTGGGCCCTT TTCACAGTAG ATAAAACAGT CTTTGTATTG ATTATATCAC ACTAATGGAT 2040
 GAACGGTTGA ACTCCCTAAG GTAGGGGCAA GCACAGAACA GTGGGGTCTC CAGCTGGAGC 2100
 CCCCAGCTCT TGTAATACA CTAAAAATCT AAAAGTGAAA AAAAAAAAAA AAAAAAAAAA 2160
 AAAAAAGGAA TTC

FOE020"22456860

FIG. 9A

huTNF-R

GAATTCTCTG GACTGAGGCT CCAGTTCTGG CCTTTGGGGT TCAAGATCAC TGGGACCAGG 60
CCGTGATCTC TATGCCCGAG TCTCAACCCT CAACTGTCAC CCCAAGGCAC TTGGGACGTC 120
CTGGACAGAC CGAGTCCCGG GAAGCCCCAG CACTGCCGCT GCCACACTGC CCTGAGCCCA 180
AATGGGGGAG TGAGAGGCCA TAGCTGTCTG GC

213/1 243/11
ATG GGC CTC TCC ACC GTG CCT GAC CTG CTG CTG CCA CTG GTG CTC CTG GAG CTG TTG GTG
Met Gly Leu Ser Thr Val Pro Asp Leu Leu Leu Pro Leu Val Leu Leu Glu Leu Leu Val
273/21 303/31
GGA ATA TAC CCC TCA GGG GTT ATT GGA CTG GTC CCT CAC CTA GGG GAC AGG GAG AAG AGA
Gly Ile Tyr Pro Ser Gly Val Ile Gly Leu Val Pro His Leu Gly Asp Arg Glu Lys Arg
333/41 363/51
GAT AGT GTG TGT CCC CAA GGA AAA TAT ATC CAC CCT CAA AAT AAT TCG ATT TGC TGT ACC
Asp Ser Val Cys Pro Gln Gly Lys Tyr Ile His Pro Gln Asn Asn Ser Ile Cys Cys Thr
393/61 423/71
AAG TGC CAC AAA GGA ACC TAC TTG TAC AAT GAC TGT CCA GGC CCG GGG CAG GAT ACG GAC
Lys Cys His Lys Gly Thr Tyr Leu Tyr Asn Asp Cys Pro Gly Pro Gly Gln Asp Thr Asp
453/81 483/91
TGC AGG GAG TGT GAG AGC GGC TCC TTC ACC GCT TCA GAA AAC CAC CTC AGA CAC TGC CTC
Cys Arg Glu Cys Glu Ser Gly Ser Phe Thr Ala Ser Glu Asn His Leu Arg His Cys Leu
513/101 543/111
AGC TGC TCC AAA TGC CGA AAG GAA ATG GGT CAG GTG GAG ATC TCT TCT TGC ACA GTG GAC
Ser Cys Ser Lys Cys Arg Lys Glu Met Gly Gln Val Glu Ile Ser Ser Cys Thr Val Asp
573/121 603/131
CGG GAC ACC GTG TGT GGC TGC AGG AAG AAC CAG TAC CGG CAT TAT TGG AGT GAA AAC CTT
Arg Asp Thr Val Cys Gly Cys Arg Lys Asn Gln Tyr Arg His Tyr Trp Ser Glu Asn Leu
633/141 663/151
TTC CAG TGC TTC AAT TGC AGC CTC TGC CTC AAT GGG ACC GTG CAC CTC TCC TGC CAG GAG
Phe Gln Cys Phe Asn Cys Ser Leu Cys Leu Asn Gly Thr Val His Leu Ser Cys Gln Glu
693/161 723/171
AAA CAG AAC ACC GTG TGC ACC TGC CAT GCA GGT TTC TTT CTA AGA GAA AAC GAG TGT GTC
Lys Gln Asn Thr Val Cys Thr Cys His Ala Gly Phe Phe Leu Arg Glu Asn Glu Cys Val
753/181 783/191
TCC TGT AGT AAC TGT AAG AAA AGC CTG GAG TGC ACG AAG TTG TGC CTA CCC CAG ATT GAG
Ser Cys Ser Asn Cys Lys Lys Ser Leu Glu Cys Thr Lys Leu Cys Leu Pro Gln Ile Glu
813/201 843/211
AAT GTT AAG GGC ACT GAG GAC TCA GGC ACC ACA GTG CTG TTG CCC CTG GTC ATT TTC TTT
Asn Val Lys Gly Thr Glu Asp Ser Gly Thr Thr Val Leu Leu Pro Leu Val Ile Phe Phe
873/221 903/231
GGT CTT TGC CTT TTA TCC CTC CTC TTC ATT GGT TTA ATG TAT CGC TAC CAA CGG TGG AAG
Gly Leu Cys Leu Leu Ser Leu Leu Phe Ile Gly Leu Met Tyr Arg Tyr Gln Arg Trp Lys
933/241 963/251
TCC AAG CTC TAC TCC ATT GTT TGT GGG AAA TCG ACA CCT GAA AAA GAG GGG GAG CTT GAA
Ser Lys Leu Tyr Ser Ile Val Cys Gly Lys Ser Thr Pro Glu Lys Glu Gly Glu Leu Glu
993/261 1023/271
GGA ACT ACT ACT AAG CCC CTG GCC CCA AAC CCA AGC TTC AGT CCC ACT CCA GGC TTC ACC
Gly Thr Thr Thr Lys Pro Leu Ala Pro Asn Pro Ser Phe Ser Pro Thr Pro Gly Phe Thr
1053/281 1083/291
CCC ACC CTG GGC TTC AGT CCC GTG CCC AGT TCC ACC TTC ACC TCC AGC TCC ACC TAT ACC
Pro Thr Leu Gly Phe Ser Pro Val Pro Ser Ser Thr Phe Thr Ser Ser Ser Thr Tyr Thr
1113/301 1143/311
CCC GGT GAC TGT CCC AAC TTT GCG GCT CCC CGC AGA GAG GTG GCA CCA CCC TAT CAG GGG
Pro Gly Asp Cys Pro Asn Phe Ala Ala Pro Arg Arg Glu Val Ala Pro Pro Tyr Gln Gly
1173/321 1203/331
GCT GAC CCC ATC CTT GCG ACA GCC CTC GCC TCC GAC CCC ATC CCC AAC CCC CTT CAG AAG
Ala Asp Pro Ile Leu Ala Thr Ala Leu Ala Ser Asp Pro Ile Pro Asn Pro Leu Gln Lys

FOE020"22465850

FIG. 9B

1233/341 1263/351
TGG GAG GAC AGC GCC CAC AAG CCA CAG AGC CTA GAC ACT GAT GAC CCC GCG ACG CTG TAC
Trp Glu Asp Ser Ala His Lys Pro Gln Ser Leu Asp Thr Asp Asp Pro Ala Thr Leu Tyr
1293/361 1323/371
GCC GTG GTG GAG AAC GTG CCC CCG TTG CGC TGG AAG GAA TTC GTG CGG CGC CTA GGG CTG
Ala Val Val Glu Asn Val Pro Pro Leu Arg Trp Lys Glu Phe Val Arg Arg Leu Gly Leu
1353/381 1383/391
AGC GAC CAC GAG ATC GAT CGG CTG GAG CTG CAG AAC GGG CGC TGC CTG CGC GAG GCG CAA
Ser Asp His Glu Ile Asp Arg Leu Glu Leu Gln Asn Gly Arg Cys Leu Arg Glu Ala Gln
1413/401 1443/411
TAC AGC ATG CTG GCG ACC TGG AGG CGG CGC ACG CCG CGG CGC GAG GCC ACG CTG GAG CTG
Tyr Ser Met Leu Ala Thr Trp Arg Arg Arg Thr Pro Arg Arg Glu Ala Thr Leu Glu Leu
1473/421 1503/431
CTG GGA CGC GTG CTC CGC GAC ATG GAC CTG CTG GGC TGC CTG GAG GAC ATC GAG GAG GCG
Leu Gly Arg Val Leu Arg Asp Met Asp Leu Leu Gly Cys Leu Glu Asp Ile Glu Glu Ala
1533/441 1563/451
CTT TGC GGC CCC GCC GCC CTC CCG CCC GCG CCC AGT CTT CTC AGA TGA 1580
Leu Cys Gly Pro Ala Ala Leu Pro Pro Ala Pro Ser Leu Leu Arg Stop

GGCTGCGCCC CTGCGGGCAG CTCTAAGGAC CGTCCTGCGA 1620
GATCGCCTTC CAACCCCACT TTTTCTGGA AAGGAGGGGT CCTGCAGGGG CAAGCAGGAG 1680
CTAGCAGCCG CCTACTTGGT GCTAACCCT CGATGTACAT AGCTTTCTC AGCTGCCTGC 1740
GCGCCGCCGA CAGTCAGCGC TGTGCGCGCG GAGAGAGGTG CGCCGTGGGC TCAAGAGCCT 1800
GAGTGGGTGG TTTGCGAGGA TGAGGGACGC TATGCCTCAT GCCCGTTTGG GGTGTCCTCA 1860
CCAGCAAGGC TGCTCGGGGG CCCCTGGTTC GTCCCTGAGC CTTTTTCACA GTGCATAAGC 1920
AGTTTTTTTT GTTTTGTGTT TGTGTTGTTT TGTTTTTAAA TCAATCATGT TACACTAATA 1980
GAAACTTGGC ACTCCTGTGC CCTCTGCCCTG GACAAGCACA TAGCAAGCTG AACTGTCCTA 2040
AGGCAGGGGC GAGCACGGAA CAATGGGGCC TTCAGCTGGA GCTGTGGACT TTTGTACATA 2100
CACTAAAATT CTGAAGTTAA AAAAAAAAAA AAAAGGAATT C 2141

FIG. 9B

FIG.10

